

## A new species of *Amblysperma* (Asteraceae: Mutisieae)

GREG J. KEIGHERY

Department of Conservation and Land Management,  
Western Australian Wildlife Research Centre,  
P.O. Box 51, Wanneroo, Western Australia, 6065  
e-mail:gregk@calm.wa.gov.au

### Abstract

*Amblysperma minor* G. J. KEIGHERY (Asteraceae-Mutisieae), a new species from Western Australia, is described and illustrated.

### Introduction

*Amblysperma* has had a complicated generic history. The sole species was originally described in DE CANDOLLE (1836) as *Celmisia spathulata*, a predominantly New Zealand genus. BENTHAM independently created the monotypic genus *Amblysperma* BENTH. several months later by naming *Amblysperma scapigera* in ENDLICHER et al. (1837). BENTHAM (1866) retained this nomenclature; however, MUELLER (1882) transferred the species to *Trichocline* as *T. scapigera* (BENTH.) F. MUELL. *Trichocline* is a predominantly South American genus of Asteraceae, comprising about 25 species, now with one very disjunct species in Western Australia.

WILLIS (1967) made the correct combination of the earliest available name as *Trichocline spathulata* (DC.) WILLIS. He also noted that "No other member of this tribe (Mutisieae) is indigenous to the Australian Commonwealth, indeed our *Trichocline* has close affinities with *Gerbera* and might well be regarded as the "gerbera" counterpart on this side of the Indian Ocean - just as *Cymbonotus* is the Australian analogue of *Arctotheca* (Capeweed)." HIND (2001) considered that the Australian species was not congeneric with *Trichocline* and combined the earliest name into *Amblysperma* as *A. scapigera* (DC.) HIND. I concur with BENTHAM and HIND in recognizing this poorly placed group as a separate Australian endemic genus *Amblysperma*.

The vascular plant flora of the Mediterranean region of Western Australia is highly diverse and still relatively poorly known. Currently all populations of *Amblysperma* in Western Australia are considered part of the widespread species *Amblysperma spathulata*. Because the plants often present their inflorescence after the leaves have

completely withered, current herbarium material often lacks detailed taxonomically critical information on habit, floret colour, root characters and leaf morphology.

Over the past decade the Western Australian Department of Conservation and Land Management has undertaken intensive floristic and reserve surveys of the Swan Coastal Plain (GIBSON et al. 1994, KEIGHERY 1999). One new taxon uncovered during these surveys was a distinctive undescribed species of *Amblysperma*. This paper forms part of a continuing series (KEIGHERY 1997, 1998, 2001a,b) documenting the taxonomic outcome of these surveys.

### Taxonomy

*Amblysperma minor* G.J. KEIGHERY, sp. nov. - Fig.1.

**Type:** Western Australia. Tuart Forest, SW Ludlow, 33° 37'S 115° 33'E, 13.XII.1994, G. J. KEIGHERY 13247 (PERTH 04122852, holotype).

*Amblysperma minor* G.J. KEIGHERY, sp. nov., differt a *A. scapigera* (DC.) HIND statura minore, foliis glabris erectis lanceolatis vel oblanceolatis.

Perennial caespitose herb from an abbreviated stem covered in the fibrous remains of older petioles, dying back to the rootstock in late summer. Tuberous roots, 10–30, light brown, linear, slender, terete, uniform along length, 2–3 mm wide, 5–15 cm long; tubers perennial but added to each year; some non-tuberous adventitious roots produced from the apex of old tubers. Leaves all radical, 5–15, erect, lanceolate to oblanceolate, 5–12 cm long, petiolate, narrowly obovate, glabrous except for long hairs at the base; blade 3–5 cm long, 5–10 mm wide; margins undulate, sinuate and broadly lobed; apex blunt, acute. Scape solitary, erect, 10–30 cm tall, slender, 1–2 mm wide, reddish, mostly glabrous except for silky hairs at base and cottony indumentum just below head; scape bracts 2–8, linear, acuminate, 4–7 mm long. Heads solitary. Involucre 10–15 mm diameter, narrowly hemispherical; involucre bracts narrowly ovate to linear-obovate, imbricate, 7–9 mm long, cottony pubescent, greenish; apex brown, long acute; outer involucre bracts shorter and more ovate. Marginal florets 11–15, white inside, pink-red outside; lower lip narrowly ovate, 23–25 mm long, c. 3 mm wide, apex shortly 3-lobed.

**Flowering Period.** From late spring (November) to January in summer.

**Distribution.** The species occurs on either side of the forest regions of southern Western Australia, where *Amblysperma scapigera* is found (Fig.2).

**Habitat.** This species grows in shallow fresh water claypans that fill with rain in winter and dry in early summer (the Western Australian equivalent of Vernal Pools). Leaves are produced when the pans are filled or drying, senescing as the pans dry. Flowering

commences after the pans have dried.

**Conservation Status.** The species is represented in several small and large nature reserves.

**Other specimens examined.** Western Australia: Lake Muir Nature Reserve, 11.XII.1997, G.J. KEIGHERY 15434 (PERTH); Yarnup Nature Reserve, 25.X.1997, G.J. KEIGHERY & N. GIBSON 2638 (PERTH); Cobertup Nature Reserve, 10.XII.1997, G.J. KEIGHERY 15214 (PERTH); Gracetown, 14.XII.1994, G.J. KEIGHERY 14767 (PERTH); Brickwood Reserve, Byford, 29.XII.1992, G.J. KEIGHERY 12724 (PERTH); 9 km from Boyanup to Capel, 33°31' S 115° 38' E, 16.XI.1984, G.J. KEIGHERY 7417 (PERTH); Ironstone Gully, Treeton Forest Block, 33° 49' S 115° 13' E, 11.XI.1993, B.J. KEIGHERY & N. GIBSON 564 (PERTH); 2 km north of Waroona, 22.VIII.1993, G.J. KEIGHERY 13507 (PERTH); Capel Nature Reserve, 13.XII.1994, G.J. KEIGHERY 13251 (PERTH); Recreation Reserve, Scott National Park, 34° 16' S 115° 16' E, 29.XII.1990, G.J. KEIGHERY 12257 (PERTH); Qualen Reserve, west of York, 31° 54' S 116° 47' E. B. SALTER & R. BETJAMAN 10 (PERTH); Beaufort River Reserve, 14.XI.2003, G.J. KEIGHERY 16569 (PERTH), Waterloo, 21.XII.2003, B.J. KEIGHERY 3193 (PERTH).

The new species is smaller in nearly all aspects compared to *Amblyserma scapigera*. It is characterised when vegetative by the erect, glabrous, lanceolate-oblancolate leaves compared to the large spreading, obovate-ovate, broadly lobed to almost lyrate, abaxially white cottony hairy leaves of *A. scapigera*. The peduncle of *A. scapigera* is stouter; cottony hairy with larger scape bracts and up to 50 cm tall, compared to the shorter, slender and largely glabrous peduncle of *A. minor*.

## References

- BENTHAM, G. 1866. *Flora Australiensis*, vol III. Reeve & Co., London.
- CANDOLLE, A. P. DE 1836. *Prodromus systematis naturalis regni vegetabilis*, vol. 5. Treuttel et Würtz, Parisiis.
- ENDLICHER, S. L., FENZL, E., BENTHAM, G. & H. W. SCHOTT 1837. *Enumeratio plantarum quas in Novae Hollandiae ora austro-occidentali ad fluvium Cygnorum et in Sinu Regis Georgii collegit Carolus liber baro de Hugel*. F. Beck, Vindobonae.
- GIBSON, N., KEIGHERY, B. J., KEIGHERY, G. J., BURBIDGE, A. H. & M. N. LYONS 1994. *A Floristic Survey of the Southern Swan Coastal Plain*. Report for the Australian Heritage Commission by the Department of Conservation and Land Management and the Conservation Council of Western Australia (Inc.).
- HIND, D. J. N. 2001. A new combination in *Amblyosperma* (Compositae: Mutisieae). *Kew Bull.* 56: 711–713.
- KEIGHERY, G. J. 1997. A new subspecies of *Lambertia* R. BR. (Proteaceae). *Nuytsia* 11: 283–284.
- KEIGHERY, G. J. 1998. Taxonomy of *Diplopeltis huegelii* (Sapindaceae). *Nuytsia* 12: 289–291.
- KEIGHERY, G. J. 1999. *Conservation status of the vascular flora of the southern Swan Coastal Plain*. Report for Environment Australia. Department of Conservation and Land Management, Perth.
- KEIGHERY, G. J. 2001a. A new subspecies of *Isotropis cuneifolia* (Fabaceae). *Nuytsia* 13: 471–474.
- KEIGHERY, G. J. 2001b. A new species of *Chamaescilla* (Anthericaceae) from Western Australia. *Nuytsia* 13: 475–478.
- MUELLER, F. (BARON) VON 1882. *Systematic census of Australian plants, with chronologic, literary and geographic annotations. Part I. Vasculares*. Govt. Printer, M'Carron, Bird & Co., Melbourne.
- WILLIS, J. H. 1967. Notes on two species of Western Australian Compositae. *Western Australian Naturalist* 10: 157–160.

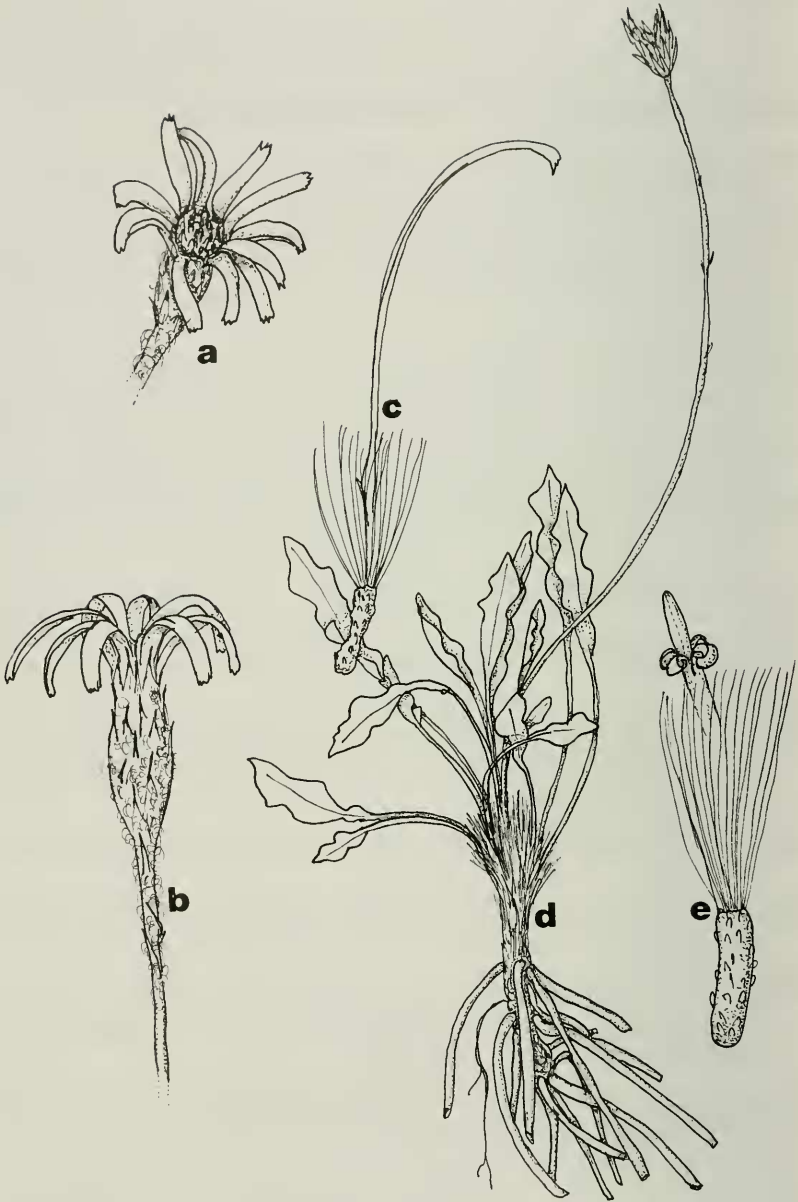


Fig. 1. *Amblysperma minor* G. J. KEIGHERY

a: Inflorescence,  $\times 1/2$

b: Side view of inflorescence,  $\times 1/2$

c: Ray floret,  $\times 2$

d: Habit,  $\times 1/2$

e: Disc floret,  $\times 2$

(a, b, c, e: B. J. KEIGHERY 3193, PERTH; d: G. J. KEIGHERY 16569, PERTH).

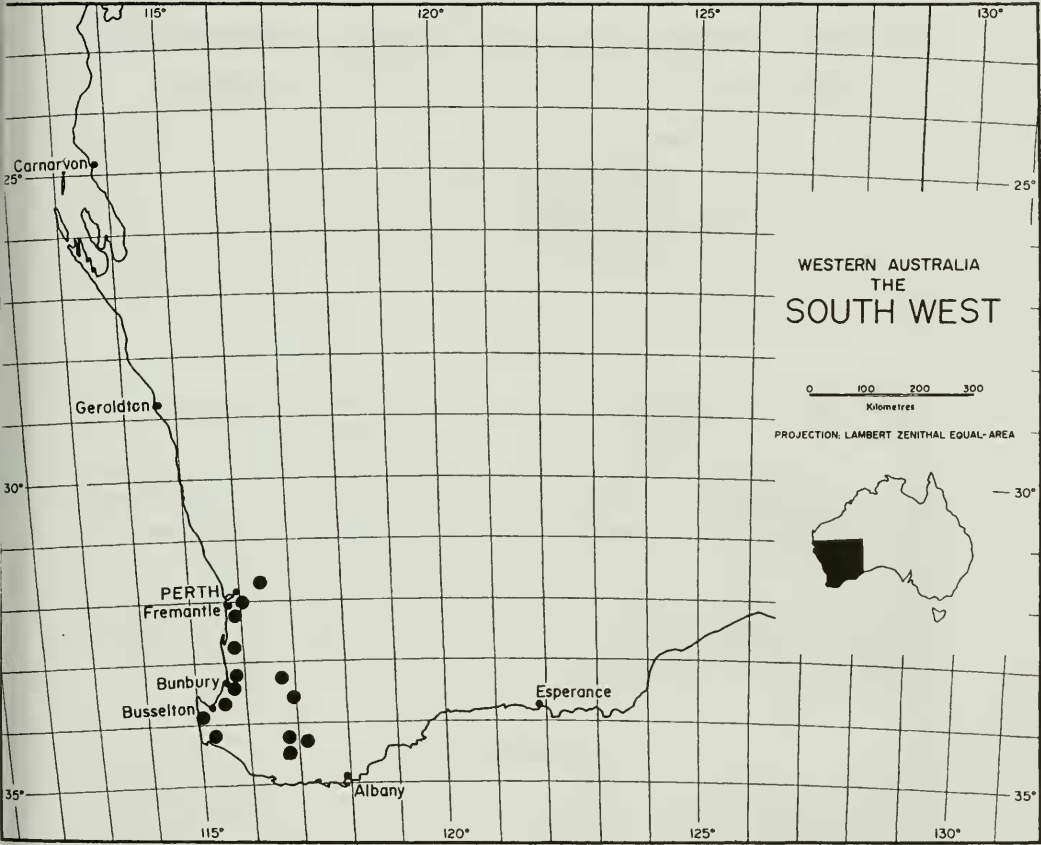


Fig. 2. Distribution of *Amblyserma minor* G. J. KEIGHERY